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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,498	07/30/2003	Jose Fernandes Dos Santos	CLBR-06	9690
26875	7590	04/13/2005	EXAMINER	
WOOD, HERRON & EVANS, LLP 2700 CAREW TOWER 441 VINE STREET CINCINNATI, OH 45202			PRICE, CARL D	
			ART UNIT	PAPER NUMBER
			3749	

DATE MAILED: 04/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

51°

**Office Action Summary**

Application No.

10/630,498

Applicant(s)

SANTOS, JOSE FERNANDES  
DOS

Examiner

CARL D. PRICE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119.**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “motorized non-return valve” (claim 2) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### Claim Objections

Claims 1-7 are objected to because of the following informalities:

- In claim 1, line 4, “contact” should be - -is in fluid flow communication with - -;
- In claim 2, line 2, “shows” should be - - is in the form of - -.

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- In claim 4, line 4, the phrase “there be generated the highest possible amount of lighting” should be - - the highest possible amount of light is generated - -.
- In claim 5, line 3, the term “relies” should be - - is supported - -.

Appropriate correction is required.

**Claim Rejections - 35 USC § 112**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term “pilot burner” in claims 1-7 is used by the claim to mean “spark igniter”, while the accepted meaning is “a small fuel fed burner.” And, in claims 11-14, the term storage “battery” is used by the claim to mean “tank”, while the accepted meaning is “an electric storage device”. These

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terms cause the claims to be indefinite because the specification does not clearly redefine the terms.

Also, regarding claims 1-7, the word "means" is preceded by the word(s) "external control" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

Claims 1-7 are also vague and indefinite for the following reasons:

- In claim 1, line 2, there is no proper antecedent basis for "its";
- In claim 1, line 3, there is no proper antecedent basis for "the other connection";
- In claim 1, line 4, there is no proper antecedent basis for "the end of which";
- In claim 1, line 5, there is no proper antecedent basis for "the former";
- In claim 1, line 7, there is no proper antecedent basis for "the latter";
- In claim 1, line 10, there is no proper antecedent basis for "the external control means";
- In claim 1, line 10, there is no proper antecedent basis for "the flow of gas";
- In claim 3, line 3, there is no proper antecedent basis for "its";
- In claim 4, line 4, there is no proper antecedent basis for "the gas flow";
- In claim 5, line 4, there is no proper antecedent basis for "the highest possible";

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- In claim 5, line 4, there is no proper antecedent basis for "its";
- In claim 7, line 1, there is no proper antecedent basis for "it"; and,
- In claim 7, line 1, there is no proper antecedent basis for "the several electrical connections".

**Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1-4: Rejected under 35 U.S.C. 102(b)**

Claims 1-4, are rejected under 35 U.S.C. 102(b) as being anticipated by US005478232

(DILLINGER ET AL).

US005478232 (DILLINGER ET AL) shows and discloses a device for gas combustion comprising:

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- a basic structure (10) which is formed by a solenoid valve (14) connected to a gas-supply piping (17) and a pressure regulator (20; i.e. – the nozzle) and on which is mounted a gas burner (28);
- a pilot gas burner (38; i.e. – an electric spark discharge electrode, insulator (37), ) intended for producing a spark causing the gas supplied to the gas burner (28) to ignite the fuel;
- a optical heat sensor (51) measuring the heat rate generated by the device.

In regard to claim 2, the recitation “the pressure regulator (4) may be replaced with a motorized non-return valve” is deemed a recitation of intended use that fails to provide a structural difference between the claimed invention and the prior.

**Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 5-14: Rejected under 35 U.S.C. 103(a)**

Claims 5-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over

**US005478232 (DILLINGER ET AL).**

**US005478232 (DILLINGER ET AL)** shows and discloses a device for gas combustion comprising:

- a basic structure (10) which is formed by a solenoid valve (14) connected to a gas-supply piping (17) and a pressure regulator (20; i.e. – the nozzle) and on which is mounted a gas burner (28);
- a pilot gas burner (38; i.e. – an electric spark discharge electrode, insulator (37), ) intended for producing a spark causing the gas supplied to the gas burner (28) to ignite the fuel;
- a optical heat sensor (51) measuring the heat rate generated by the device.

In regard to claims 5 and 6, since the type of ignition unit (i.e. – including a porcelain body and a protection crown) and the type of heat sensor selected for a given burner apparatus would necessarily depend on numerous design concerns such as the design characteristics of a controller to which it is attached, the overall size and shape of the burner, the location of the sensor relative to the burner, etc., to select an igniter with a porcelain body with a protective crown and sensor including a metallic body, a “bimetallic” and fixed threads, for example, can be viewed as nothing more than a mere matter of choice in design absent the showing of any new or unexpected results produced therefrom over the prior art of record.

In regard to claim 7, Official Notice is taken that it is well known to connect a plurality of gas burner units, and their necessary electrical connections and individual operating components, together to form a system such as for providing a plurality of street lamps for illuminating an



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outdoor area. Thus, in view of that which is well known and for the purpose, it would have been obvious to a person having ordinary skill in the art to connect a plurality of gas burner units, such that in **US005478232 (DILLINGER ET AL)**, together to form a system.

Furthermore, in regard to claim 7, the recitation "can be connected to a gas-supply pipe" is deemed a recitation of intended use that fails to provide a structural difference between the claimed invention and the prior.

*Note: A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and In re Otto, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).*

In regard to claims 8-12, Official Notice is taken that it is well known that to connect a plurality of gas burner units, and their necessary electrical connections and individual operating components along with a pressure manometer and valves, together to form a system such as for providing a plurality of street lamps for illuminating an outdoor area. Thus, in view of that which is well known and for the known purpose, it would have been obvious to a person having ordinary skill in the art to connect a plurality of gas burner units, such that in **US005478232 (DILLINGER ET AL)**, together to form a system.

In regard to claims 9-10, **US005478232 (DILLINGER ET AL)** shows (figure 4-7) an electronic control module (30) including an on/off knob (16), a general switch ("power switch"),

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transformer (T1, T2). In addition, Official Notice is taken that electronic control circuits are known to include fuses for circuit protection, to provide electric power thereto by a 110/220VCA power source, and to remotely control electronic burner control modules from computers.

Therefore, in view of that which is well known and for the well known purpose, it would have been obvious to a person having ordinary skill in the art to connect construct a control module, such that in **US005478232 (DILLINGER ET AL)**, together to form a system. pressure manometer (31) and valves (32).

In regard to claim 14, Official Notice is taken that it is well known to provide gas burner operated heating units with at least a gas sensor acting as a complementary means of safety to the system by, for example monitoring the quality of air surrounding the burner unit to determine and respond to unsafe or dangerous air quality caused as a result of improper an/or dangerous burner operation (e.g. – vent free gas fired simulated fireplaces). Therefore, in view of that which is well known and for the well known purpose, it would have been obvious to a person having ordinary skill in the art to provide a control module, such that in **US005478232 (DILLINGER ET AL)**, with least a gas sensor acting as a complementary means of safety.

### **Conclusion**

See the attached USPTO FORM892 for prior art made of record and not relied upon but which is considered pertinent to applicant's disclosure.

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**USPTO CUSTOMER CONTACT INFORMATION**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARL D. PRICE whose telephone number is (571) 272-4880. The examiner can normally be reached on Monday through Friday between 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on (571) 272-4877. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



CARL D. PRICE  
Primary Examiner  
Art Unit 3749

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